Instructor: George Happ, 245 Arctic Health, phone 474-5492  email fgmh@uaf.edu
Lecture: Tuesday & Thursday 11:15 am - 12:45 pm, Room 210, Irving I
Recitation: Thursday, 2-5 pm, Room 208, Irving I.

15 Jan. - 20 Jan.  A. INTRODUCTION-CELL ORGANIZATION & BIOLOGICAL MOLECULES
(2 lectures) Chapter 1 - Evolution of the Cell
Chapter 2 - Small Molecules, Energy, and Biosynthesis, pp. 60-88.
Chapter 3 - Molecular Recognition Processes, pp. 89-98, pp. 111-135
Chapter 4 - The Structure of Cells in the Microscope, pp. 139-156.
Fractionation of Cells and Analysis of their Molecules, pp.162-177.

22 Jan. - 17 Feb    B. MEMBRANES
(6 lectures) Chapter 10 - Membrane Structure, pp. 478-507.
Chapter 11 - Principles of Membrane Transport pp. 508-522.
Chapter 12 - Compartments and Protein Sorting, pp. 551-599.
Chapter 13 - Vesicular Transport Pathways, pp. 600-654.

19 February         Hour Exam I

19 Feb-5 Mar.       C. SIGNAL TRANSDUCTION AND THE CYTOSKELETON
Chapter 16 - The Cytoskeleton, pp. 788-847.

10 Mar. - 12 Mar.   D. BIOENERGETICS
(2 lectures) Chapter 14 - Energy Conversion, pp. 655-696.

16 Mar. - 22 Mar.    Spring Recess

24 March            Hour Exam II

26 Mar. - 9 Apr.    E. INFORMATION STORAGE AND READOUT
(5 lectures) Chapter 3 - Nucleic acids, pp. 98-110 (review)
Chapter 6 - RNA and protein synthesis, pp. 223-242 (review)
Chapter 8 - The Cell Nucleus, pp. 336-384
Chapter 9 - Control of Gene Expression, pp. 401-469

14 April           Hour Exam III

16 April - 30 April F. CELL CYCLING AND CELL DEATH
Chapter 18 - The Mechanics of Cell Division, pp. 911-949.

7 May, 10:15 am – 12:15 pm (Tuesday) - Final Examination (Comprehensive)


*Biology 661 students will receive extra assignments.
Biology 461 (661*) - Cell Biology - Proposed Recitation Schedule

Instructor: George Happ, 245 Arctic Health, phone 474-5492
Recitation: Thursday, 2-5 pm, Irving 1, Room 208.

January 22 - Wilson and Hunt - Chapter 6 - Basic Genetic Mechanisms

January 29 - Demonstration of electron microscope

February 5 - Wilson and Hunt - Chapter 10 - Membrane Structure
   - Chapter 11 - Membrane Transport

February 12 - Review for Exam I

February 19 - Wilson and Hunt - Chapter 12 - Intracellular Compartments
   - Chapter 13 - Vesicular Traffic

February 27 - Wilson and Hunt - Chapter 15 - Cell Signaling
   - Chapter 16 - The Cytoskeleton

March 5 - Wilson and Hunt - Chapter 14 - Energy Conversion

March 12 - Review for Exam II

March 19 - SPRING RECESS

March 26 - Wilson and Hunt - Chapter 8 - The Cell Nucleus

April 2 - Wilson and Hunt - Chapter 9 - Control of Gene Expression

April 9 - Review for Exam III

April 16 - Wilson and Hunt - Chapter 17 - The Cell-Division Cycle
   - Chapter 19 - The Mechanics of Cell Division

April 23 - Cell Sorter Demonstration

April 30 - Review for Final Examination


*Biology 661 students will receive extra assignments.
Biology 461 (661*) - Cell Biology – Grading Policy  

Spring 1998

You can make a total of 1000 points in this course.

**Lecture Exams – (450 points)**

There will be three 90 minute lecture examinations (19 February, 24 March, 14 April). Each exam will let you apply your understanding of Cell Biology to data analysis, with much of the data taken from current research articles. The lecture exams will emphasize recent lecture topics. However, Cell Biology is a coherent discipline and each topic builds on previous ones.

Each lecture exam will be worth 150 points.

**Final Exam – (350 points)**

The Final Exam will be comprehensive and worth 350 points.

**Lab/Recitation – (200 points)**

The recitation will include written assignments, presentations, and discussion.

Each of the 8 written assignment, due at the beginning of the class period, can be worth up to 10 points

Each of the 3 formal presentation will be worth 25 points.

General contributions to class discussion will be worth 45 points.